

# Access to Land Data Products Through the Land Processes DAAC

Aljean Klaassen (klaassen@usgs.gov), Carolyn Gacke (cgacke@usgs.gov), SAIC, USGS EROS, Sioux Falls, South Dakota 57198

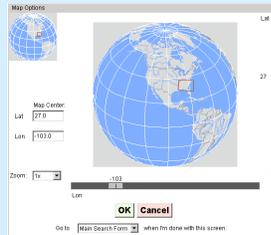
## Introduction

ASTER and MODIS land data products are accessible from the U.S. Geological Survey (USGS) EROS Data Center's Land Processes Distributed Active Archive Center (LP DAAC) through several mechanisms: the EOS Data Gateway (EDG), the LP DAAC Data Pool, the USGS Global Visualization Viewer (GloVis) and the USGS Seamless Distribution System. The LP DAAC Web site (<http://LPDAAC.usgs.gov>) provides links to each of these data access mechanisms and contains other useful information on products and services available from the LP DAAC. The Terra ASTER and MODIS data cover the acquisition period of March, 2000 to the present, whereas Aqua MODIS data cover the acquisition period of July, 2002 to the present.

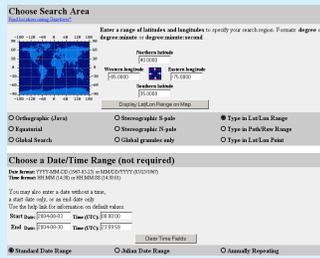


## EOS Data Gateway (EDG)

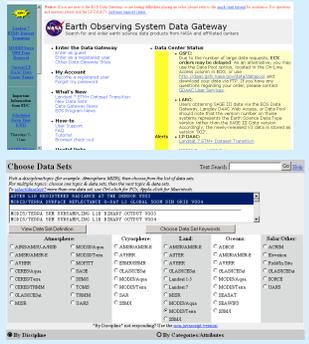
The EDG currently is the only mechanism to access the complete inventory of ASTER and MODIS land products available from the LP DAAC (<http://edcimswww.cr.usgs.gov/pub/inwsmelcome/>). The EDG provides numerous options for specifying and qualifying searches of the inventory using multiple criteria including dataset(s), geographic and temporal coverage, data quality, and other extended metadata criteria and ordering options. An online tutorial is offered to assist users with navigating through the various options.



Once a search has been executed and results have been received, a listing of all granules (the explicit orderable product) is provided and the geographic coverage and metadata attributes can be displayed. When a browse image exists, it can be viewed from the "Image QuickLook" field in the Granule Listing search results. If the granule also is available from the LP DAAC Data Pool, then this will be indicated under the field for "On-line Access". The "Special Processing Links" field will provide access to On-Demand products for ASTER granules.



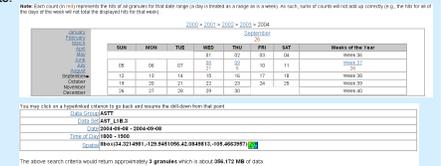
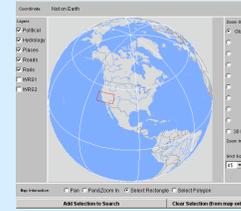
Media options available for products ordered through the EDG include FTP-pull, CD, DVD, or DLT. Standard ASTER products are provided for a nominal fee and MODIS products are provided at no cost.




## LP DAAC Data Pool

The LP DAAC Data Pool (<http://LPDAAC.usgs.gov/datapool/datapool.asp>) contains a subset of the ASTER and MODIS product inventory that is available through electronic access or media options. The Data Pool contains ASTER Level 1B data with coverage of the United States and its territories and is provided at no cost. A "rolling" 12-month collection of Terra and Aqua MODIS Level-3 land products are available, as well as a "rolling" 4-day collection of daily surface reflectance products. The Data Pool Web pages provide a summary of the specific products that are available.

Data product search and retrieval may be accomplished using a client interface or by "drilling down" through the Data Pool file directory structure interface. All Data Pool data may also be accessed through user-developed clients or automated scripts.

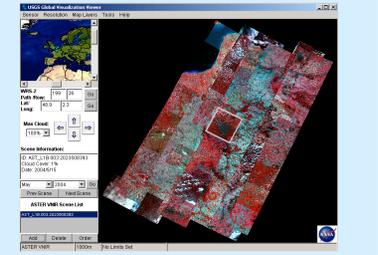
The bottom row of icons under the 'Granule' heading on the 'Results' screen are for the following options (left to right): view complete metadata; view browse image; view metadata and browse; convert (HDF-EOS to GeoTIFF, reproject, subset) and order; add granule to shopping cart. Data are available on CD, DVD, DLT as well as FTP-pull.

## USGS Global Visualization Viewer (GloVis)

The LP DAAC has undertaken the effort to enhance ASTER and MODIS land product visibility to the land remote sensing community through the USGS Global Visualization Viewer (<http://glovis.usgs.gov>), which offers the capability to expediently prepare global and regional data availability on the basis of browse products and metadata attributes.



The current release includes ASTER products and specific MODIS land products that have associated browse products. Additional MODIS land products with product-specific or surrogate browse will be made available for visualization as the browse products become available.



## USGS Seamless Distribution System

The USGS Seamless Distribution System (<http://seamless.usgs.gov/>) provides interactive data access and retrieval through the use of Open GIS Consortium standards and protocols for Web mapping services. There are a number of vector cartographic layers available (political boundaries, roads, rivers and streams) as well as raster data layers (land cover, elevation, orthorectified imagery). The LP DAAC has developed a time series of the Terra MODIS 1-km 16-day vegetation index (MOD13A2) product that is available as a mosaic for the conterminous United States for the years 2000 to 2004. The original MOD13A2 tiles were used to construct a mosaic that was transformed to the Lambert Azimuthal Equal Area projection. The intention is to make the MODIS vegetation indices available as a dynamic layer of *The National Map*.



